

REMARKS

1. Preliminary Remarks

a. Status of the Claims

Claims 25, 26, 29, 30, and 35-38 are pending and under active consideration. Claims 25 and 29 are amended. Claims 39-43 are new. Applicant respectfully requests entry of the amendments and remarks made herein into the file history of this application. Upon entry of the amendment, claims 25, 26, 29, 30, and 35-43 will be pending and under active consideration.

b. Amendment to the Claims

In order to expedite prosecution and without prejudice to seeking claims of broader scope in a continuing application, claims 25 and 29 have been amended in part to be directed to an isolated nucleic acid of 19 to 24 nucleotides or 50-140 nucleotides wherein the sequence of the nucleic acid comprises (a) at least 19 consecutive nucleotides of SEQ ID NO: 159, an RNA encoded by (a), or the complement of (a) or (b). Claims 39-43 are new and are directed to a probe comprising a human insert, wherein the human insert consists of the sequence of the nucleic acid of claim 25, 26, 29, or 30 and wherein the probe comprises no other insert but the nucleic acid of claims 25, 26, 29, or 30.

Support for new claims 39-43 can be found throughout the specification, for example, new paragraph 270 as amended in Applicant's last response of August 21, 2009.

Accordingly, the invention provides several substantially pure nucleic acids (e.g., genomic DNA, cDNA or synthetic DNA) each comprising a novel human GAM oligonucleotide, vectors comprising the DNAs, probes comprising the DNAs, a method and system for bioinformatic detection of GAM oligonucleotides and their respective targets, laboratory methods for validating expression of GAM oligonucleotides, and a method and system for selectively modulating translation of known target genes of the GAM oligonucleotides.

c. Amendment to the Specification

On pages 3 of the Office Action, the Examiner asserts that the amended specification contains some nucleotide sequence that have not been identified by SEQ ID NO identifiers. Applicant has reviewed the submitted amended specification passages and has been able to identify SEQ ID NOS in most of the passages or identified a GAM number that has previously been assigned a SEQ ID NO. Nevertheless, in order to expedite prosecution, Applicant has amended the paragraphs 0322 and 0323 to indicate the SEQ ID NO: 159 for GAM345990 and SEQ ID NO:

1578845 for EGFR target sequence. Applicant submits that the amendment is in compliance with 37 C.F.R. §1.1821-1.825 and that each sequence is clearly identified by a SEQ ID NO. Applicant therefore respectfully request that the objection to the amended passages in the Specification has been addressed and should be withdrawn.

d. Claim Objections

On page 4 of the Office Action, the Examiner has objected to claims 26, 29 and 30 for particular wording of the claim. With regard to claims 26 and 30, the Examiner objects to the language “is of the sequence” since it allegedly broadens the claim beyond the sequence consisting of SEQ ID NO: 159 or SEQ ID NO: 6821380. As suggested by the Examiner and for which the Applicant is grateful, the claims have been amended in part to recite “wherein the sequence is SEQ ID NO: 159” or “wherein the sequence is SEQ ID NO: 6821380” thereby overcoming the objection.

With regard to claim 29, the Examiner objects to the phrase “80% nucleotides identical to”. Applicant submits that in view of the amendment of claim 29 as discussed above, the objection is moot.

2. Patentability Remarks

a. 35 U.S.C. §112, First Paragraph

On pages 6-9 of the Office Action, the Examiner rejects claims 25, 29, 35, and 37 under 35 U.S.C. §112, first paragraph, for allegedly lacking written descriptive support. In view of the foregoing amendment, Applicant submits that the rejection of claims 25, 29, 35 and 37 is moot and therefore should be withdrawn.

b. 35 U.S.C. §102, Anticipation

Khovorova et al., (US Patent Publ. Appl. No. 2007/0031844)

On page 10 of the Office Action, the Examiner rejects claims 25 and 35 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication Appl. No. 2007/0031844 (hereafter Khovorova). Specifically, the Examiner asserts that Khovorova discloses a 19-25 base siRNA comprising SEQ ID NO: 1216559 that would comprise a sequence that is at least 80% identical to a sequence that comprises at least 19 consecutive nucleotides of SEQ ID NO: 159 or a complement thereof. Again, in view of the foregoing amendments, Applicant submits that the rejection of claim 25 and its vector dependent claim 35 is moot and should be withdrawn.

Woblgemuth et al., (US Patent No. 6,905,827)

On page 11 of the Office Action, the Examiner rejects claims 29 and 37 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,905,827 (hereafter “Wohlgemuth”). Specifically, the Examiner asserts that Wohlgemuth discloses a 50-nucleotide DNA sequence that comprises a sequence that is at least 80% identical to the complement of a sequence that comprises at least 19 consecutive nucleotides of SEQ ID NO: 159. In view of the foregoing amendments, Applicant submits that the rejection of claims 29 and 37 is moot and should be withdrawn.

3. Conclusion

Applicant respectfully submits that the instant application is in good and proper order for allowance and early notification to this effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the instant application, the Examiner is encouraged to call the undersigned at the number listed below.

Respectfully submitted,

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